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TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER 4041J-919/NP
INTERNATIONAL APPLICATION NO. PCT/JP03/12175	INTERNATIONAL FILING DATE 24 September 2003 (24.09.2003)	U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/523,352
TITLE OF INVENTION START SIGNAL OUTPUTTING CIRCUIT		PRIORITY DATE CLAIMED 25 September 2002 (25.09.2002)
APPLICANT(S) FOR DO/EO/US MIZUNO, Kazuo, et al.		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input type="checkbox"/> This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.		
2. <input checked="" type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.		
3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.		
4. <input type="checkbox"/> The US has been elected (Article 31).		
5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ul style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 		
6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ul style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 		
7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ul style="list-style-type: none"> a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 		
8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).		
9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).		
10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).		
Items 11 to 20 below concern document(s) or information included:		
11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.		
12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.		
13. <input type="checkbox"/> A preliminary amendment.		
14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. <u>Corrected and Annotated versions</u>		
15. <input type="checkbox"/> A substitute specification.		
16. <input type="checkbox"/> A power of attorney and/or change of address letter.		
17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.		
18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).		
19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).		

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U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/523,352		INTERNATIONAL APPLICATION NO. PCT/JP03/12175		ATTORNEY'S DOCKET NUMBER 4041J-919/NP	
20. Other items or information: Express Mail Transmittal (EV 717 342 290 US); Response to Notification of Missing Requirements Under 35 USC 371 with copy of Preliminary Amendment as filed and copy of Declaration as filed; copy of Notification of Missing Requirements Under 35 USC 371; copy of Rtn Postcard w/ Express Mail Label; Return Postcard					
The following fees have been submitted				CALCULATIONS	PTO USE ONLY
21. <input type="checkbox"/> Basic national fee (37 CFR 1.492(a))..... \$300				\$	
22. <input type="checkbox"/> Examination fee (37 CFR 1.492(c))				\$	
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0				\$	
All other situations.....\$200					
23. <input type="checkbox"/> Search fee (37 CFR 1.492(b))				\$	
If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0					
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....\$100					
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB..... \$400					
All other situations.....\$500					
TOTAL OF 21, 22 and 23 =				0.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	/50 =		x \$250	\$	0.00
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$	0.00
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	- 20 =		x \$ 50	\$	
Independent claims	- 3 =		x \$200	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$	0.00
TOTAL OF ABOVE CALCULATIONS =				\$	0.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.				\$	0.00
SUBTOTAL =				\$	0.00
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	0.00
TOTAL NATIONAL FEE =				\$	0.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	0.00
TOTAL FEES ENCLOSED =				\$	0.00
				Amount to be refunded:	\$
				Amount to be charged	\$

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

- a. ☐ A check in the amount of \$ _____ to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

H. Keith Miller
HARNESS, DICKEY & PIERCE, P.L.C.
P. O. BOX 828
Bloomfield Hills, MI 48303
United States of America


SIGNATURE

H. Keith Miller
NAME

22,484
REGISTRATION NUMBER

Dated: 22 Sept 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Express Mail No.: EV 717 342 290 US

Date of Deposit: 22 September 2005

Application No.: 10/523,342
International
Filing Date: 24 September 2003
Applicant: MIZUNO, Kazuo, et al.
Title: START SIGNAL OUTPUTTING CIRCUIT
Attorney Docket: 4041J-919/NP

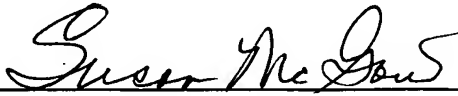
Mail Stop PCT
Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

EXPRESS MAIL TRANSMITTAL

The following papers are being deposited with the United States Postal Service Express Mail Post Office to Addressee on 22 September 2005 and addressed for receipt by the United States Patent and Trademark Office:

1. Express Mail Transmittal (Label No. EV 717 342 290 US);
2. Transmittal Letter to the US Designated/Elected/Office Concerning a Filing Under 35 USC 371 (3 pages, in duplicate);
3. Response to Notification of Missing Requirements Under 35 USC 371 (2 pages, in duplicate);
4. Copy of Declaration and Power of Attorney as filed (4 pages);
5. Copy of Preliminary Amendment as filed (10 pgs);
6. Corrected Application Data Sheet (4 pages);
7. Annotated Application Data Sheet (4 pages);
8. Copy of Return Receipt Postcard w/ Express Mailing Label (1 pg);
9. Copy of Notification of Missing Requirements Under 35 USC 371;
10. Return Postcard.

HARNES, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600


Susan McGaw

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
AS DESIGNATED/ELECTED OFFICE (DO/EO/US)

Application No.: 10/523,352
International
Filing Date: 24 September 2003
Applicant: MIZUNO, Kazuo, et al.
Title: START SIGNAL OUTPUTTING CIRCUIT
Attorney Docket: 4041J-919/NP

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attn: Authorized Officer Mamie P. Person

RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS
UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE

Madam:

This is in response to the Notification of Missing Requirements Under 35 U.S.C. 371 mailed July 29, 2005. The Notification indicated that additional claim fees were due in the amount of \$650.00 and that the Declaration and Power of Attorney was not executed in accordance with either 37 CRF 1.66 or 37 CFR 1.68.

In response, Applicants respectfully submit the following.

At the time of filing the US National Phase Application, a Preliminary Amendment was filed to eliminate multiple dependent claims. This amendment resulted in 15 total claims with 3 independent claims, which is within the allowable number of claims. Accordingly, Applicants assert that no additional claim fees are due in this application. A copy of the Preliminary Amendment as filed is enclosed for the Examiner's reference.

As to the issue of non-compliance of the Declaration and Power of Attorney, at the time of filing the application an executed Declaration and Power of Attorney was filed with the application papers that was a standard PTO form, i.e., PTO/SB/106. Applicants assert that this Declaration fully meets the criteria for 37 CFR 1.68, and therefore, is allowable as filed. A copy of the Declaration as filed is enclosed herewith.

Also enclosed is a copy of the stamped Return Receipt Postcard and Express Mail Transmittal Label indicating that all the above referenced documents were received by the PCT Section of the United States Patent and Trademark Office on January 28, 2005.

Accordingly, Applicants respectfully submit that the Preliminary Amendment and Declaration and Power of Attorney as originally filed were in suitable condition for acceptance at the time of filing and that the Notice of Missing Requirements be withdrawn and the 371 Acceptance Letter and Official Filing Receipt be issued with a retroactive filing date of January 28, 2005.

If for some reason Applicants have not paid a sufficient amount to prevent abandonment of this Application, the Commissioner is hereby authorized to charge any fee due or credit any overpayment to deposit account no. 08-0750. A duplicate copy of this document is enclosed for this purpose.

Should there be any questions regarding the present application or this Response, please direct all communications to the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: 22 Sept 2005

By: _____

H. Keith Miller
Reg. No. 22,484

Harness, Dickey & Pierce, P. L. C.
P. O. Box 828
Bloomfield Hills, MI 48303
(248) 641-1600

HKM/smc

Declaration and Power of Attorney for Patent Application
特許出願宣誓書及び委任状
Japanese Language Declaration
日本語宣言書

下記の氏名の発明者として、私は以下の通り宣言します。

As a below named inventor, I hereby declare that:

私の住所、郵便住所、国籍は下記の私の氏名の後に記載された通りです。

My residence, post office address and citizenship are as stated next to my name.

下記の名称の発明に関して特許請求の範囲に記載され、特許出願している発明内容について、私が最初かつ唯一の発明者(下記の氏名が一つの場合)もしくは最初かつ共同発明者であると(下記の名称が複数の場合)信じています。

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

START SIGNAL OUTPUTTING CIRCUIT

上記発明の明細書(下記の欄で x 印がついていない場合は、本書に添付)は、

the specification of which is attached hereto unless the following box is checked:

☒ 2003 年 9 月 24 日に提出され、米国出願番号または PCT 国際出願番号を PCT/JP03/12175 とし、(該当する場合) に補正されました。

☒ was filed on September 24, 2003 as United States Application Number or PCT International Application Number PCT/JP03/12175 and was amended on (if applicable).

私は、特許請求範囲を含む上記補正後の明細書を検討し、内容を理解していることをここに表明します。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第 37 編第 1.56 項に規定されるとおり、特許性の有無について重要な情報を開示する義務があることを認めます。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

私は、以下に記載する特許もしくは発明者証の外国出願について米国法典第 35 編 119 条(a)-(d)項又は 365 条(b)項に基づく外国優先権を、又は以下に記載する米国以外の国の少なくとも一カ国を指定している PCT 国際出願について米国法典第 35 編 365 (a) 項に基づく外国優先権をここに主張するとともに、優先権を主張している本出願の前に出願された特許もしくは発明者証の外国出願又は PCT 国際出願を、枠内をマークすることで以下に示します。

I hereby claim foreign priority under Title 35, United States Code, Section 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application for which priority is claimed.

Japanese Language Declaration
 (日本語宣言書)

Prior Foreign Application(s)
 外国での先行出願

Priority Not Claimed
 (優先権主張なし)

1.	2002-279567	Japan	25/September/2002	<input type="checkbox"/>
	(Number) (番号)	(Country) (国名)	(Day/Month/Year Filed) (出願年月日)	
2.	2003-308263	Japan	1/September/2003	<input type="checkbox"/>
	(Number) (番号)	(Country) (国名)	(Day/Month/Year Filed) (出願年月日)	

私は、下記の米国仮特許出願について第35編米国法典119条(e)項に基づく権利をここに主張いたします。

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

(Application No.)	(Filing Date)
(出願番号)	(出願日)

(Application No.)	(Filing Date)
(出願番号)	(出願日)

私は、下記の米国特許出願について米国法典第35編120条に基づく権利、又は米国を指定している下記のPCT国際出願について米国法典第35編365条(c)に基づく権利をここに主張します。また、本出願の各請求範囲の内容が米国法典第35編112条第1段で規定された方法で先行する米国特許出願又はPCT国際出願に開示されていない限り、その先行出願の出願日以降で当該国内出願又はPCT国際出願の出願日までの期間中に入手された、連邦規則法典第37編1.56項で定義された特許性の有無に関する重要な情報について開示義務があることを認識しています。

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of application.

Application No.
(出願番号)

Filing Date
(出願日)

Status :
(現況)

Patented,
(特許許可済)

Pending,
(係属中)

Abandoned
(放棄済)

Japanese Language Declaration
(日本語宣言書)

私は、私自身の知識に基づいて本宣言書中で私が行う表明が真実であり、かつ私の入手した情報と私の信じることに基く表明が全て真実であると信じていること、さらに故意になされた虚偽の表明及びそれと同等の行為は米国法典第18編第1001条に基き、罰金または拘禁、もしくはその両方により処罰されること、そしてそのような故意による虚偽の声明を行えば、出願した、又は既に許可された特許の有効性が失われることを認識し、よってここに上記のごとく宣誓を致します。

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

委任状： 私は下記の発明者として、本出願に関する一切の手続を米特許商標局に対して遂行する弁理士または代理人として、下記の者を指名いたします。

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

H. Keith Miller, Reg. No. 22484, Michael J. Schmidt, Reg. No. 34007, and each practitioner of Customer Number 27572 (Harness, Dickey & Pierce, P.L.C.)

書類送付及び直接電話連絡先：

Customer Number 27572, (248) 641-1600

唯一または第一発明者 (Full name of sole or first inventor)	Kazuo Mizuno
発明者の署名 (Inventor's Signature)	<i>Kazuo Mizuno</i>
日付 (Date)	AUG. 24. 2004
住所 (Residence)	Nagoya-city, Japan
国籍 (Citizenship)	Japan
郵便住所 (Post Office Address)	c/o DENSO CORPORATION 1-1, Showa-cho, Kariya-city, Aichi-pref., 448-8661 Japan

第二共同発明者 (Full name of second joint inventor)	Ryu Kimura
発明者の署名 (Inventor's Signature)	<i>Ryu Kimura</i>
日付 (Date)	AUG. 24. 2004
住所 (Residence)	Chita-gun, Japan
国籍 (Citizenship)	Japan
郵便住所 (Post Office Address)	c/o DENSO CORPORATION 1-1, Showa-cho, Kariya-city, Aichi-pref., 448-8661 Japan

☒ Additional inventor(s) is (are) listed on the attached sheet which is incorporated herein by reference.

Japanese Language Declaration
(日本語宣言書)

第三共同発明者 (Full name of third joint inventor)	Hisanori Uda
発明者の署名 (Inventor's Signature)	<i>Hisanori Uda</i>
日付 (Date)	<i>AUG. 27, 2004</i>
住所 (Residence)	Nagoya-city, Japan
国籍 (Citizenship)	Japan
郵便住所 (Post Office Address)	c/o KABUSHIKI KAISHA TOYOTA CHUO KENKYUSHO 41-1, Aza Yokomichi, Oaza Nagakute, Nagakute-cho, Aichi-gun, Aichi-pref., 480-1192 Japan

第四共同発明者 (Full name of fourth joint inventor)	Hiroaki Hayashi
発明者の署名 (Inventor's Signature)	<i>Hiroaki Hayashi</i>
日付 (Date)	<i>AUG. 27, 2004</i>
住所 (Residence)	Nagoya-city, Japan
国籍 (Citizenship)	Japan
郵便住所 (Post Office Address)	c/o KABUSHIKI KAISHA TOYOTA CHUO KENKYUSHO 41-1, Aza Yokomichi, Oaza Nagakute, Nagakute-cho, Aichi-gun, Aichi-pref., 480-1192 Japan

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: Not yet assigned – 371 of PCT/JP03/12175

International
Filing Date: 24 September 2003

Applicant: MIZUNO, Kazuo, et al.

Title: START SIGNAL OUTPUTTING CIRCUIT

Attorney Docket: 4041J-919/NP

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Sir:

Prior to examination of the present application, please consider the following.

Amendments to the Specification begin on page 3 of this paper.

Amendments to the Claims begin on page 4 of this paper.

Amendments to the Drawings begin on page 9 of this paper.

Remarks begin on page 10 of this paper.

COPY

AMENDMENTS TO THE SPECIFICATION

On Page 19, please replace the Paragraph beginning on Line 16 with the following paragraph rewritten in amendment format:

Fig. 9 is a circuit diagram showing the construction of a start signal outputting circuit 1000 according to a fifth embodiment of the invention. The start signal outputting circuit 1000 is made up of a matching circuit 110, a differential RF/DC convertor part 100, a first-stage filter part 120, an amplifier 200, a second-stage filter part 210, a constant voltage source 300, and bias potential generating circuits ~~310, 320 and 330~~ 301, 302, and 303. The start signal outputting circuit 1000 of Fig. 9 consists of the construction of the with-filter amplifier part 250 apart from the first-stage filter part 120 added to the RF/DC-conversion circuit 150 of Fig. 4.

Beginning on Page 19, please replace the paragraph that begins on Line 27 and ends on Page 20, Line 9 with the following paragraph rewritten in amendment format:

In Fig. 9, to avoid complexity, many of the reference numerals of the constituent devices of the seven constant current circuits of the amplifier 200 have been omitted. However, its construction is exactly the same as the amplifier 200 of Fig. 6 and Fig. 7, and the same reference numerals as those of the corresponding devices should of course be assigned. And, in Fig. 9, the wiring between the constant voltage source 300 and the supply destination of the potential V_{B0} from the constant voltage source 300, and between the bias potential generating circuits ~~310, 320, 330~~ 301, 302, and 303 and the supply destinations of their bias potentials V_{B1} , V_{B2} , V_{B3} is not shown.

On Page 20, please replace the Paragraph beginning on Line 10 with the following paragraph rewritten in amendment format:

The matching circuit 110 is made up of a capacitance C_{00} for removing an inputted d.c. component (this may be outside the matching circuit, i.e. as a previous stage), an open half stub S_H , a grounded capacitance C_0 and a stub S . The differential RF/DC convertor part 100 is the same construction as the differential RF/DC convertor part 100 of Fig. 4 and is supplied with the potential V_{B0} from the constant voltage source 300 and the bias potential V_{B1} from the bias potential generating circuit ~~310~~ 301. The constructions of the first-stage filter part 120, the amplifier 200 and the second-stage filter part 210 are exactly the same as in Fig. 7, and the amplifier 200 is supplied with the potential V_{B0} from the constant voltage source 300 and the bias potentials V_{B2} , V_{B3} from the bias potential generating circuits ~~320, 330~~ 302, 303.

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Original) A start signal outputting circuit having an RF/DC convertor circuit for converting a high frequency power (RF) into a direct current potential (DC) and outputting it, said RF/DC convertor circuit comprising:

a device working as a diode;

a first transistor connected to an anode side of said diode, for working as a high resistance by a positive potential being applied thereto; and

a second transistor inserted between a cathode side of said diode and ground, for working as a high resistance by a positive potential being applied thereto.

2. (Original) A start signal outputting circuit recited in claim 1, wherein said RF/DC convertor circuit further comprises a resonance circuit connected between said cathode side of said diode and ground for shorting with the high frequency power of a specified frequency.

3. (Original) A start signal outputting circuit having an RF/DC convertor circuit for converting a high frequency power (RF) into a direct current potential (DC) and outputting it, said RF/DC convertor circuit comprising:

a device working as a diode;

a first npn transistor having its emitter connected to an anode side of said diode and its base and collector to which a predetermined positive potential is applied;

a second npn transistor having its collector connected to a cathode side of said diode and its emitter connected to ground via a resistance;

a third npn transistor having its emitter connected to a base of said second npn transistor and its base and collector to which a predetermined positive voltage is applied; and

a resonance circuit connected between said cathode side of said diode and ground for shorting a specified frequency.

4. (Currently amended) A start signal outputting circuit recited in ~~any one of claims 1 to 3~~ claim 1, wherein said RF/DC convertor circuit further comprises a matching circuit provided on said anode side of said diode for obtaining matching with respect to an inputted high frequency power.

5. (Currently amended) A start signal outputting circuit recited in ~~any one of claims 1 to 3~~ claim 1, further comprising a counterpart circuit of the same construction as said RF/DC convertor circuit, of which an anode of a device working as a diode is provided with a d.c. potential based on the positive potential given to said RF/DC convertor circuit, so that a differential RF/DC convertor part is formed by the said RF/DC convertor circuit and said counterpart circuit.

6. (Original) A start signal outputting circuit recited in claim 5, further comprising:

a differential amplification part for carrying out a differential amplification of at least one stage for an output of said differential RF/DC convertor part; and

a low-pass filter disposed at least one of between said differential RF/DC convertor part and said differential amplification part and a later stage of said differential amplification part,

wherein outputs of said differential amplification part and low-pass filter transmit a band of below 1/1000 compared to a band of said high frequency power signal.

7. (Original) A start signal outputting circuit recited in claim 6, wherein a transfer function of a part composed of said low-pass filter and said differential amplification part has a characteristic of monotonous decrease with frequency of a high frequency signal.

8. (Original) A start signal outputting circuit comprising:
a RF/DC convertor part for converting a high frequency signal of a desired frequency into a d.c. signal (RF/DC converting) ; and
a low-pass filter and low-pass amplifier for transmitting a band of below 1/1000 compared to a specified band of said high frequency signal.

9. (Original) A start signal outputting circuit recited in claim 8, wherein a transfer function of a part composed of said low-pass filter and low-pass amplifier has a characteristic of monotonous decrease as a whole with frequency of said high frequency signal.

10. (New) A start signal outputting circuit recited in claim 3, wherein said RF/DC convertor circuit further comprises a matching circuit provided on said anode side of said diode for obtaining matching with respect to an inputted high frequency power.

11. (New) A start signal outputting circuit recited in claim 3, further comprising a counterpart circuit of the same construction as said RF/DC convertor circuit, of which an anode of a device working as a diode is provided with a d.c. potential based on the positive potential given to said RF/DC convertor circuit, so that a differential RF/DC convertor part is formed by the said RF/DC convertor circuit and said counterpart circuit.

12. (New) A start signal outputting circuit recited in claim 10, further comprising:

a differential amplification part for carrying out a differential amplification of at least one stage for an output of said differential RF/DC convertor part; and

a low-pass filter disposed at least one of between said differential RF/DC convertor part and said differential amplification part and a later stage of said differential amplification part,

wherein outputs of said differential amplification part and low-pass filter transmit a band of below 1/1000 compared to a band of said high frequency power signal.

13. (New) A start signal outputting circuit recited in claim 10, wherein a transfer function of a part composed of said low-pass filter and said differential

amplification part has a characteristic of monotonous decrease with frequency of a high frequency signal.

14. (New) A start signal outputting circuit recited in claim 11, further comprising:

a differential amplification part for carrying out a differential amplification of at least one stage for an output of said differential RF/DC convertor part; and

a low-pass filter disposed at least one of between said differential RF/DC convertor part and said differential amplification part and a later stage of said differential amplification part,

wherein outputs of said differential amplification part and low-pass filter transmit a band of below 1/1000 compared to a band of said high frequency power signal.

15. (New) A start signal outputting circuit recited in claim 11, wherein a transfer function of a part composed of said low-pass filter and said differential amplification part has a characteristic of monotonous decrease with frequency of a high frequency signal.

AMENDMENTS TO THE DRAWINGS

The attached "Replacement Sheet" of drawings includes changes to Figure FIG. 3B. The attached "Replacement Sheet," which includes FIGS. 3A through 3C, replaces the original sheets including FIGS. 3A through 3C.

Attachment: Replacement Sheet No. 2/10

Annotated Sheet No. 2/10 Showing Changes

REMARKS

Claims 1 - 15 are now pending in the application. The purpose of this Preliminary Amendment is to remove multiple dependent claims to reduce filing costs and to correct minor typographical inconsistencies. Basis for the amendments can be found throughout the specification, claims and drawings as originally filed. No new matter has been added. Applicant believes that the amended claims do not go beyond the disclosure of the application as filed. Consideration of the application as amended is requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: 28 January 2005

By: 



H. Keith MILER
Reg. No. 22,484

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HKM/smc

DT07 Rec'd PCT/PTO 2 JAN 2005

Applicant: MIZUNO, Kazuo, et al.	Case No.: 4041j-000919/NP
Serial No.: Not yet assigned	Filing Date: Not yet assigned
Title: START SIGNAL OUTPUTTING CIRCUIT	
10/523352	
Please acknowledge receipt of: 1. Express Mail Transmittal (EV 570 159 543 US); 2. Check in the amount of \$1,040.00; 3. Transmittal Letter to the DO/EO/US a Filing Under 35 USC 371 (2 pgs, in dup.); 4. App Data Sheet (4 pages); 5. English Translation of Intn'l Application (27 pgs); 6. English Trans of Formal Drawings (10 pages); 7. Signed Declaration and Power of Attorney (4 pages); 8. Preliminary Amendment (10 pgs) w/ drawing sheets (2 pgs); 9. Assignment Recordation Cover Sheet and Assignment (2 pages); 10. IDS w/ Form 1449, ISR and 11 cited references; 11. Pub App W 2004/030205; and 12. Return Postcard.	
By stamping and returning to Harness, Dickey & Pierce, P.L.C.	
Due: 3/25/2005	Date Mailed: 1/26/2005 Attorney: HKM
USPTO Date Stamp	

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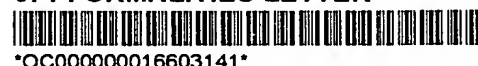
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U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/523,352	Kazuo Mizuno	4041J-919/NP

H Keith Miller
Harness Dickey & Pierce
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INTERNATIONAL APPLICATION NO.	
PCT/JP03/12175	
LA. FILING DATE	PRIORITY DATE
09/24/2003	09/25/2002

CONFIRMATION NO. 8349
371 FORMALITIES LETTER



OC000000016603141

Date Mailed: 07/29/2005

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 01/28/2005
- English Translation of the IA filed on 01/28/2005
- Copy of the International Search Report filed on 01/28/2005
- Copy of IPE Report filed on 01/28/2005
- Preliminary Amendments filed on 01/28/2005
- Information Disclosure Statements filed on 01/28/2005
- Oath or Declaration filed on 01/28/2005
- Copy of references cited in ISR filed on 01/28/2005
- U.S. Basic National Fees filed on 01/28/2005
- Assignment filed on 01/28/2005
- Priority Documents filed on 01/28/2005

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Additional claim fees of **\$650** as a non-small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.
- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date. The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) in that it:
 - is not executed in accordance with either 37 CFR 1.66 or 37 CFR 1.68.

- **\$130** Surcharge for providing the oath or declaration later than 30 months from the priority date (37 CFR 1.492(e)) is required.

SUMMARY OF FEES DUE:

Total additional fees required for this application is **\$780** for a Large Entity:

- **\$130** Late oath or declaration Surcharge.
- Total additional claim fee(s) for this application is **\$ 650**
 - **\$650** for 13 total claims over 20.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

MAMIE P PERSON

Telephone: (703) 308-9140 EXT 227

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/523,352	PCT/JP03/12175	4041J-919/NP

FORM PCT/DO/EO/905 (371 Formalities Notice)